Express Mail No. EV529814243US

International Application No.: PCT/US2005/008866

International Filing Date: 16 March 2005

**Preliminary Amendment** 

**Amendments to the Claims** 

This listing of claims will replace all prior versions and listings of claims

in the application.

**Listing of Claims** 

1. (Currently Amended) A method for measuring molecular

movement in a cell, comprising contacting a cell with a compartment marker and with a

molecular marker, imaging the marked cell with a detector, creating a compartment

mask, and eorrelate correlating said compartment mask and said molecular marker to

measure molecular movement in a cell.

2. (Original) The method of claim 1 wherein there is relative motion

between the cell and the detector.

3. (Original) The method of claim 1 wherein the molecular marker is

a fluorescent labeled antibody.

4. (Original) The method of claim 1 wherein the compartment

marker is a fluorescent molecule.

5. (Original) The method of claim 1 wherein the compartment is

nucleus, cytoplasm, or membrane.

6. (Original) The method of claim 1 wherein the molecule marked is

NF-κB.

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7. (Original) The method of claim 1 further comprising the step of inducing molecular movement in the cell.

- 8. (Original) The method of claim 7 wherein the induced molecular movement is nuclear translocation.
- 9. (Original) The method of claim 7 wherein the molecular movement is induced with LPS or IL- $1\beta$  / TNF- $\alpha$ .
- 10. (Currently Amended) A method for measuring nuclear translocation in a cell, comprising contacting a cell with a nuclear marker and with a molecular marker, imaging the marked cell with a detector, creating a nuclear mask, and eorrelate-correlating said nuclear mask and said molecular marker to measure molecular movement in a cell.
- 11. (Original) The method of claim 10 wherein there is relative motion between the cell and the detector.
- 12. (Original) The method of claim 10 further comprising the step of inducing molecular movement in the cell.
- 13. (Original) The method of claim 12 wherein the induced molecular movement is nuclear translocation.
- 14. (Original) The method of claim 12 wherein the molecular movement is induced with LPS or IL- $1\beta$  / TNF- $\alpha$ .

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15. (Original) The method of claim 10 wherein the nuclear marker is 7-AAD.

- 16. (Original) The method of claim 10 wherein the molecule marked is NF- $\kappa$ B.
- 17. (Original) The method according to any one of claims 1-16 wherein the images are collected simultaneously.
- 18. (Original) The method according to any one of claims 1-16 wherein the detector is a time delay integration charge-coupled detector.